

## 30 JUNE 2015 QUARTERLY REPORT

### Burkina Faso Gold Assets (BOE 100%, GRY earning up to 80%)

In March 2014, Gryphon Minerals Ltd (ASX: GRY) and Boss Resources (ASX: BOE) signed a binding heads of agreement to establish a joint venture over the Golden Hill and Gourma gold projects located in Burkina Faso, totalling over 1,750 km<sup>2</sup>. Refer to ASX announcement dated 4 July 2014 for full terms of the agreement.

Gryphon has completed a review of past work, acquired high resolution remote sensing datasets, completed relatively high density (>1 sample per ~6 km<sup>2</sup>) drainage sampling, supplemented by laterite sampling, where appropriate, across all joint venture projects. This strategy is allowing Gryphon to fast track targeting across the exploration licences. Some highly anomalous multi-point drainage anomalies have been identified on both projects and these are progressively being followed up by soil and first pass auger drilling seeking the mineralised bedrock source. By the end of the quarter Gryphon had collected over 16,000 soil samples and drilled nearly 1000 auger holes for ~5500m since commencing work on the JV. This exploration strategy is designed to direct drilling to those areas most likely to deliver a significant discovery and enable Gryphon to confidently release ground where appropriate geochemical techniques have been applied and the results are negative.

### Gourma Gold Project

The Gourma Project is located within the Fada N'Gourma Greenstone Belt, 250km east of Ouagadougou and only 80 km south-southwest of Niger's largest gold deposit, the 50,000 ounce per annum Samira Hill gold mine (1.9 million ounce project). The Project consists of six contiguous permits (Diabatou, Tyara, Foutouri Boutouanou, Tyabo and Kankandi) that cover a total area of approximately 1,300 km<sup>2</sup> (Fig. 1).

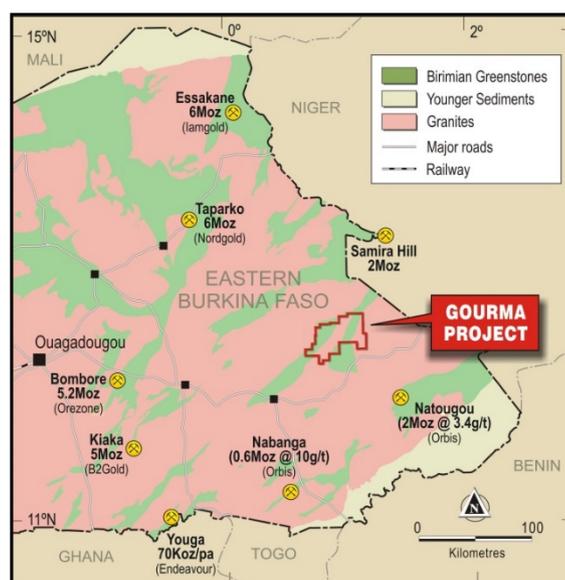


Figure 1: Gourma Project Location Map

Boss Resources were the first modern explorers on the property and completed a detailed aeromagnetic survey and extensive, mostly broad spaced reconnaissance style geochemical work involving several methods including soil, auger and rock chip sampling between 2010 and 2013. Work by Gryphon to date includes a regolith terrain and aeromagnetic interpretation, detailed BLEG stream sampling and selective lateritic lag sampling in areas where drainage geochemistry is an unreliable geochemical prospecting method, as well as 8525 soil samples plus preliminary shallow auger drilling which has returned a peak result of 27.5 g/t Au in saprolite (ASX: GRY 17 February 2015).

Multi-element drainage and laterite sample assays have been received from the four original joint venture permits and the newly acquired Tyabo and Kankandi Tenements (ASX: GRY 28 January 2015). The BLEG stream and lag results confirm the Gourma shear zone (GSZ) to be associated with some highly anomalous gold-in-drainage results. The stream analysis results also identified areas with very low background commodity and pathfinder element concentrations which are therefore areas where no more work is necessary making the task of reducing tenure, when necessary, something which can be achieved with confidence.

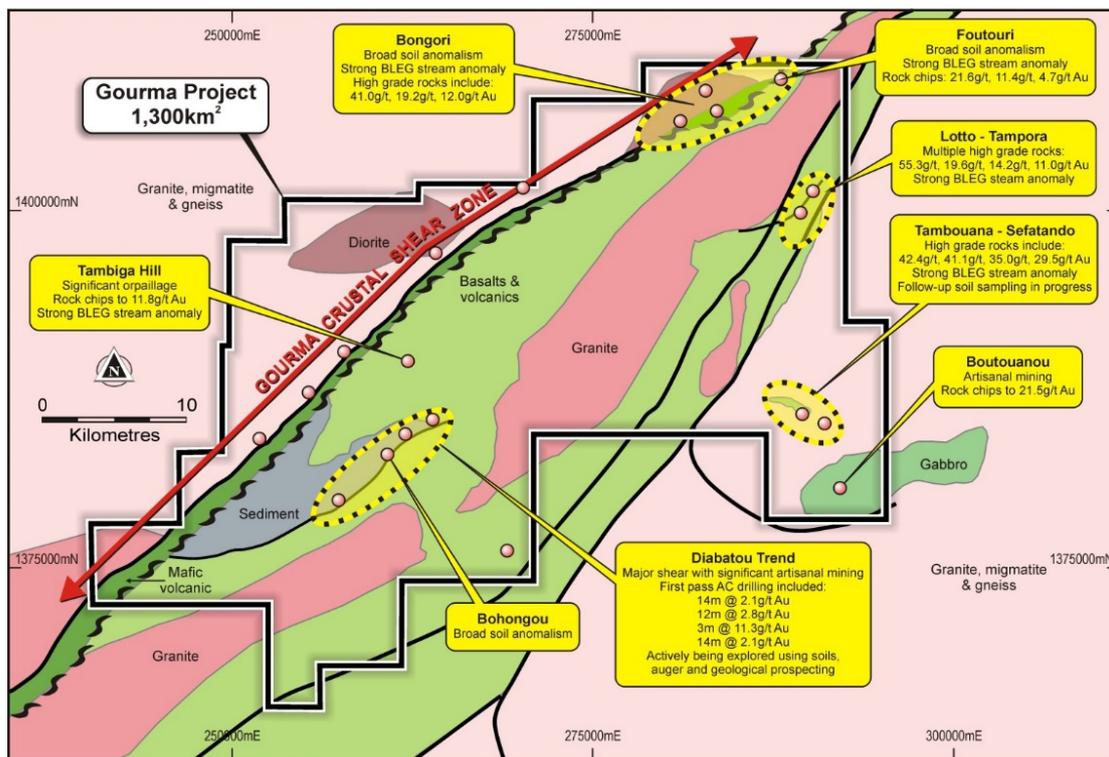


Figure 2: Gourma Project Geology and Prospects Overview

Observations and samples obtained during these field visits are assisting with geological understanding, including recognition and understanding of the mineralisation styles and associated pathfinder elements, as well as the potential controls to mineralisation. This work will continue throughout the September quarter and will complement the exploration being undertaken. The small efficient exploration team are rapidly working towards generating high quality drill targets across the large land package.

### *Gourma Shear Zone*

With the addition of the Tyabo and Kankandi Permits, the Gourma Project now includes approximately 60km of a gold bearing crustal shear which has received very little modern exploration. Along the shear there are numerous artisanal workings. Geochemical sampling by Boss utilised both soil and auger geochemistry, identifying a number of prospects which received various levels of follow-up but no substantial drilling. The Bongori South prospect returned historic rock chips to 41.0g/t, 19.2 g/t and 12.0g/t gold. 12km to the east the Foutori Prospect returned peak rock chip results of 21.6 g/t, 11.4 g/t and 4.7 g/t gold.

BLEG stream sediment sampling results from the recently acquired Tyabo and Kankandi permits were received during the quarter. The QA/QC data was verified and found to be extremely precise. The drainage results are encouraging with robust and strongly anomalous areas identified within the Kankandi permit at the Wourouwou and Djinta prospects on the Gourma Shear Zone.

Soil sampling was conducted over Djinta, Wourawou, Bongi, Fouanbori, Lotta, Sefatendo, Gariaga and Tambiga prospects. 3438 samples were submitted to the lab and a further 2080 read by pXRF seeking indications of potential pathfinder elements, lithological discriminators or alternative commodity elements returning peak results to 13.5 g/t Au from the Sefatendo-Tambouanou (S-T) Prospect.

Follow-up soil sampling programs have commenced on the new drainage anomalies, as well as second pass sampling on previously sampled anomalous zones.

### *Gariaga-Diabatou Trend – Multiple Targets*

The Gariaga-Diabatou mineralised trend extends southwest onto the recently acquired Tyabo permit. There are numerous bedrock and eluvial gold workings along the trend, extending over a strike length exceeding 10km. Mineralisation on the trend is interpreted to be on the eastern flank of an antiform which represents a bounding shear zone. Quartz tourmaline veins are more common close to the interpreted contact.

First pass drilling by Boss in 2012 returned best aircore results of **3m @ 11.3g/t gold** and **14m @ 2.1g/t gold** from Gariaga, and **14m @ 2.1g/t gold** and **12m @ 2.8 g/t gold** from the Diabatou Prospects. The aircore drilling at Diabatou remained in saprolite to an end of hole depth of 80m (ASX: BOE 4 December 2012 and 30 January 2013).

Gariaga is hosted in mafic schist and extends to the southwest beyond a contact with metasediments. Common to both prospects is mineralisation associated with quartz tourmaline veins. The metasediments comprise foliated volcanic sandstone and phyllite, carbonaceous shale and deeply weathered feldspathic semi-schist with lesser amounts of feldspar porphyroblastic schist. There is a quartz rich sandstone (quartz arenite) containing conglomeratic bands in the south west portion of the trend. Mineralisation in all three trends consists of grey, glassy to smokey quartz veins and disseminated mineralisation associated with shearing and silicified zones. This style of mineralisation represents a highly prospective target for hosting broad zones of mineralisation. The disseminated and silicified zones are strongly associated with sericite and pyrite alteration with some malachite and chalcopyrite observed along the trend.

Phased soil sampling has continued at the S-T prospect on the eastern Boutouanou permit and the Gariaga prospect on the Diabatou permit, returning a peak soil of 13.5 g/t Au. The S-T prospect occurs within a northwest trending corridor of intrusive units where rock chipping from artisanal workings has returned



historical results up to 42g/t gold. A modest soil anomaly is being outlined extending for around 4km which will allow auger testing once areas across the Gourma project are able to be objectively prioritised.

At Gariaga prospect, soil sampling has continued with a single spur line to the east, following up on anomalous lag samples collected by Gryphon in 2014, returning 1.59g/t Au.

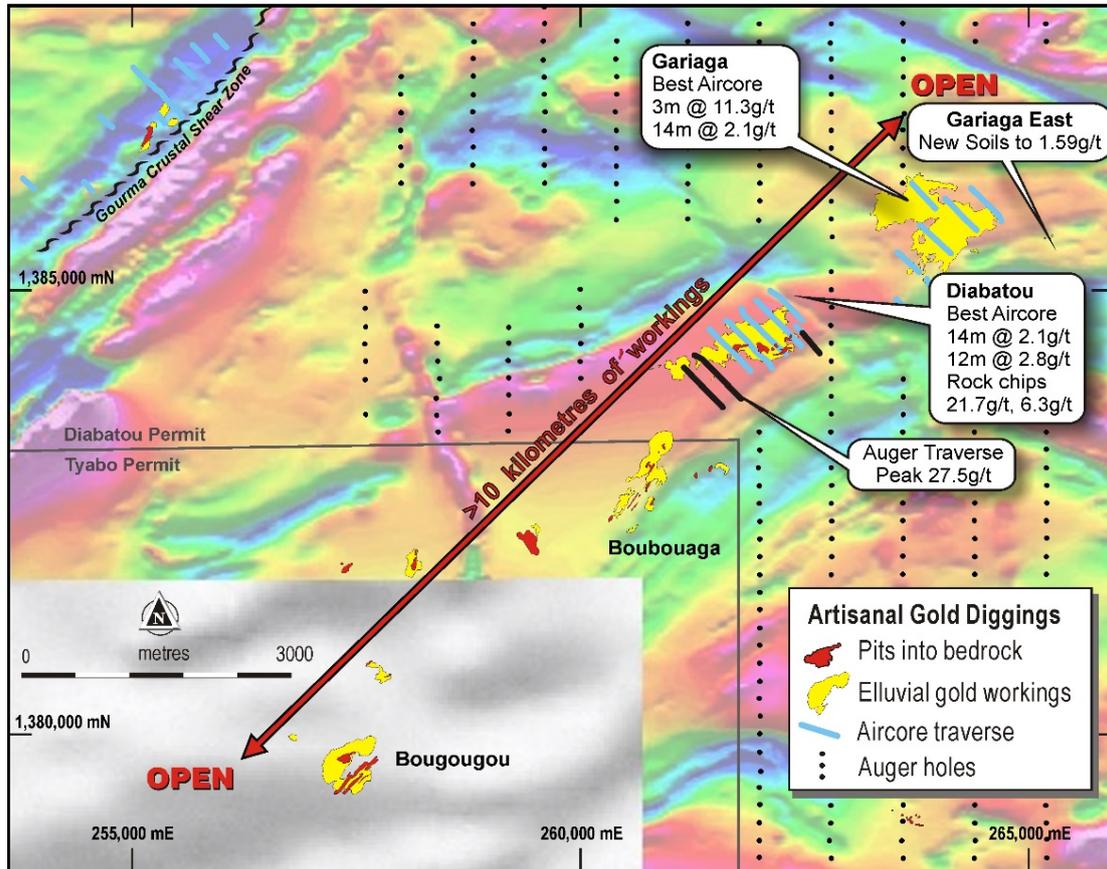


Figure 3: Gariaga – Diabatou Trend

### *Foutouri, Lotto, Tambouana, Boutounou – Eastern Target Areas*

A number of prospects with high grade surface mineralisation had previously been identified by Boss in the east and southeast of the project. In the far southeast of the tenement package the Sefatendano and Tambouana Prospects are present in northwest striking structures within sheared and altered granite and in gabbro respectively. The high grade veins in the gabbro were sampled by Boss returning peak results of 42.4 g/t, 35.6 g/t and 12.2g/t gold. The prospects are associated with strong gold-in-drainage responses. A soil geochemical program has been completed covering the strike extent and probable source of the multiple drainage anomalies; results pending.

Also of significance are the Lotto-Tampora Prospects where Boss returned best rock chips of 55.3 g/t, 19.7 g/t and 14.2 g/t gold from laminated quartz veins. Sampling by Gryphon at Lotto has returned a best rock chip result of **19.7 g/t gold** (ASX: GRY 17 February 2015). The soils responses to date have been weak, but the drainage geochemistry supports a decision to undertake further work in the area.

### Golden Hill Project

The Golden Hill Project is the most advanced of all the projects in the JV agreement area and is considered particularly prospective as it is located within the highly mineralised Houndé Greenstone Belt. This belt hosts the majority of the high grade discovered gold ounces in Burkina Faso, including Semafo's (TSX, OMF: SMF) recently discovered Siou Deposit (reserves of 769 koz @ 4.94 g/t gold) plus the high grade Yaramoko deposit owned by Roxgold (TSX.V: ROG) (790 koz @ 17.15 g/t gold). The belt also hosts Semafo's Mana Mine (6 Moz) and Endeavour Mining's (TSX: EDV, ASX: EVR) 2Moz 2.0 g/t Houndé deposit (Figure 4). The Golden Hill Project straddles the same structure and stratigraphy that host these high grade deposits.

A number of useful baseline datasets have been collected over the property by Boss and previous explorers, including Orezone Gold Corporation (TSX: ORE), who identified and undertook the initial drill campaigns on some, but not all of the prospects.

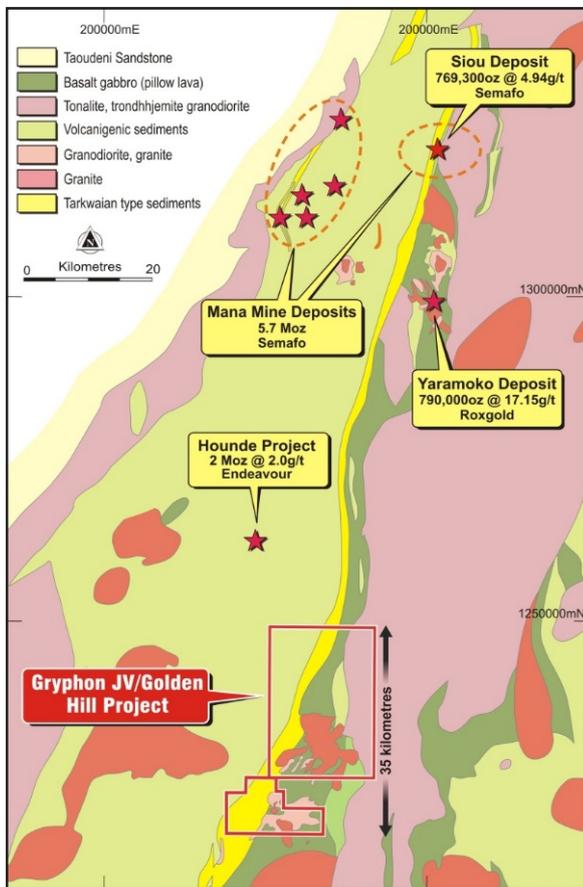


Figure 4: Golden Hill Project Location

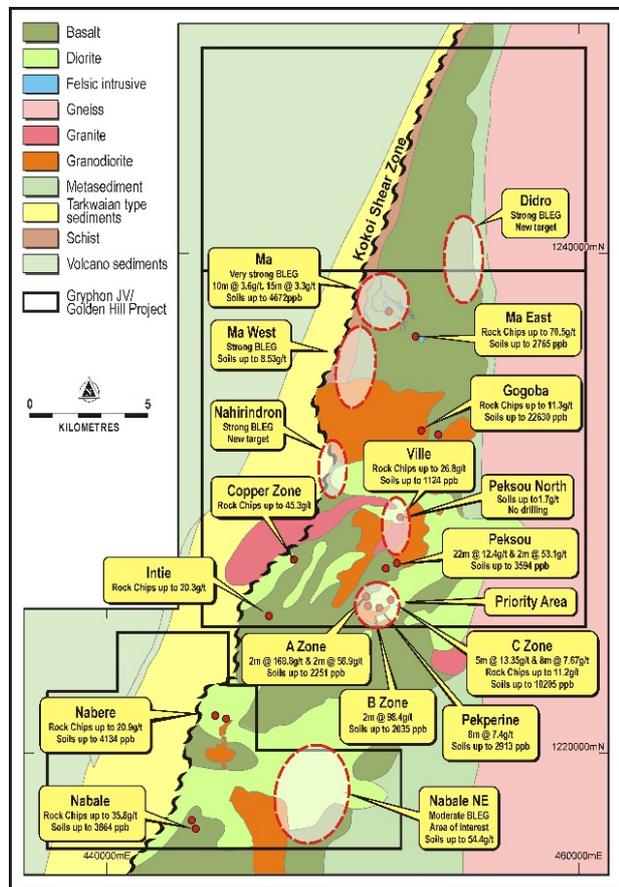


Figure 5: Golden Hill Project

Exploration work by Gryphon this quarter comprised of soil sampling (1074 samples), geological mapping and auger drilling. Auger drilling (total of 896 holes for 3,487m) focused primarily at the Ma, Peksou, Nahirindon North, C-Zone, Nahirindon South and Intiedougou prospects.

At the Ma prospect, where the strongest evidence of significant mineralisation has been detected by Gryphon to date, around half the auger drilling results (a total of 612 holes for 1,644m) have been received.

These included a peak of **8.48 g/t** gold from saprolite from the extension of a northwest trending orpillage which has returned multiple high grade rock chips up to 10 g/t gold. Other auger results are pending. The auger results have identified a continuation of the mineralised trend at Ma East in saprolite towards Ma, extending the trend more than 400m to the northeast.

At Intiedougou, auger drilling has confirmed the potential to extend the strike of C-Zone and identified and defined a new mineralised trend south of C-Zone, which has not been drill tested to date.

Detailed prospect mapping was undertaken in the Ma region with a particular focus on the undrilled Ma North zone which consists of around 1km of semi-continuous pits into mafic schist. At least three generations of fabric are present with a) moderate to steep west dipping foliation and quartz veins, b) moderate south to southwest dipping foliation and c) flat to gentle south dipping foliation. Artisanals are exploiting multiple narrow foliation parallel shears particularly along shallow plunging intersections.

The Ma North zone is one of three west-northwest striking structures (moderate to steep west dipping) which intersect a structure here termed Ma West. The Breccia zone is a narrow zone of intense hydrothermal breccia with abundant sulphide while the Big Dyke zone is an orpillage trend focused along the sheared margin of a large granitic dyke. Grab samples from an adjacent pit where the Ma West structure is well exposed returned rock chips up to 6 g/t gold. Preliminary assessment of historical drilling by Orezone indicates that the short holes drilled into Ma West were generally drilled to the west (sub-optimally).

Soil sampling on the Mogue Property returned an exceptionally high result of **54.4 g/t gold** from a single line of sampling upstream of an anomalous BLEG stream within the Nabele NE Prospect. The significance of the result is still to be determined, but at this stage it is of lower priority than other targets on the property.

### Scandinavian Assets

As the European winter months have now abated, the Boss technical team has commenced field work on the Company's assets in Scandinavia.

The field work will capitalise on the desktop studies and program design that was conducted during the first half of the year. The Boss technical team will initially undertake mapping and sampling programs with results to be released to the market when available.

### Other Opportunities

Boss continues to appraise opportunities which have mineralisation styles in developed countries which are:

1. High margin; and
2. Detectable and mappable by low cost, non-invasive, proven effective geophysical technologies.

For further information please contact:

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## Appendix 1

The following information is provided pursuant to Listing Rule 5.3.3 for the quarter ended 30 June 2015:

### SCHEDULE OF MINING TENEMENTS

Name	Country	Licence Number	Interest
Boutouanou	Burkina Faso	2011/11/410	100% (GRY farming in)
Diabatou	Burkina Faso	2011/11/409	100% (GRY farming in)
Tyara	Burkina Faso	2011/11-159	100% (GRY farming in)
Foutouri	Burkina Faso	2011/11-160	100% (GRY farming in)
Baniri	Burkina Faso	2009/09-060	100% (GRY farming in)
Intiedougou	Burkina Faso	2009/09-061	100% (GRY farming in)
Mougue	Burkina Faso	2009/09-062	100% (GRY farming in)
Kankandi	Burkina Faso	10/142/MCE	100% (GRY farming in)
Tyabo	Burkina Faso	10/144/MCE	100% (GRY farming in)
Liakka	Finland	Liakka nr.1	Right to earn 100%
Skogtrask	Sweden	Skogtrask nr.1 and 2	Right to earn 100%
		Skogtrask nr.3	100%
		Palange nr.1	100
Nottrask	Sweden	Norrtrask nr.9	100%
Lilltrask	Sweden	Lilltrask nr1, 2 and 3	100%
Linn	Norway	Linn 1 - 12	100%

No tenements were acquired or disposed of during the quarter.

There were no interests in farm-in/farm-out agreements acquired / disposed of during the quarter.

### Competent Person's Statements

*The information in this report that relates to 2012 exploration results for Gourma Gold Project is based on and fairly represents information that has been reviewed by Mr Peter Williams, Technical Director of Boss Resources Ltd. Mr Williams is a member of the Australian Institute of Geoscientists. Mr Williams has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Williams and Dr Abzalov consent to the inclusion in the report of the matters based on information in the form and context in which it appears. This information was initially reported under the 2004 Edition of the JORC Code and has not been updated on the basis that it has not materially changed since first being reported to the ASX on 4 December 2012 and 30 January 2013.*

*The information in this report that relates to recent exploration results for the Company's projects in Burkina Faso under Joint Venture with Gryphon Minerals Ltd (ASX: GRY) is based on and fairly represents information which has been compiled by Mr Sam Brooks who is a member of the Australian Institute of Geoscientists. Mr Brooks has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person, as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr Brooks is a full time employee of Gryphon Minerals Ltd, the joint venture partner of Boss Resources Ltd for the Company's Burkina Faso Projects, and has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears. This information has not materially changed since first being reported to the ASX on 28 January 2015, 17 February 2015 and 27 July 2015.*

